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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,954	03/01/2004	Shiping Wang	GL-6115DIV	6669
7590 Allegiance Corporation Attn: Kim Luna KB-1A 1430 Waukegan Road McGaw, IL 60083		EXAMINER AUGHENBAUGH, WALTER		
		ART UNIT 1794		PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,954

Applicant(s)

WANG ET AL.

Examiner

WALTER B. AUGHENBAUGH

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17, 19, 20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 15, 2008 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. Claims 16, 17 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It cannot be ascertained (from the claim language) whether or not Applicant intends to recite that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are actually present in the final product in the claimed form of milk protein salt (in regard to claim 16) and of sodium caseinate (in regard to claims 17 and 23). Furthermore, the language of the claims does not require that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are actually present in the final product.

Applicant states on pages 2-3 of the Response filed December 15, 2008 that "Applicants agree that the language of the claims does not require that the milk protein salt and sodium

caseinate are actually present in the final product”, but the fact that claims 16, 17 and 23 do not include optional language causes claims 16, 17 and 23 to read as if the milk protein salt and sodium caseinate are required in the final product claims 16, 17 and 23. Claims 16, 17 and 23 should be amended so that it is clear (from the claim language) what Applicant intends to recite as a required component of the final product, as opposed to what is not required as a component of the final product.

Claim Rejections - 35 USC § 103

4. Claims 10-14, 16, 17 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (USPN 6,239,253) in view of Hogt et al. (USPN 5,610,240).

In regard to independent claim 10, Tanaka et al. teach a synthetic elastomeric polyisoprene article consisting of a composition comprising a polyisoprene (natural rubber), where the natural rubber is the only polymer in the composition (col. 13, line 18-col. 14, line 47). Natural rubber is a polyisoprene homopolymer. See attached definition of “natural rubber” from *Hawley’s Condensed Chemical Dictionary*. Tanaka et al. teach that the tensile strength of the article is 23.7 MPa (equivalent to 3437 psi) (col. 13, line 18-col. 14, line 47). Tanaka et al. teach that the synthetic elastomeric polyisoprene article is formed from a polyisoprene (natural rubber) latex composition comprising a polymer consisting of isoprene monomers (natural rubber), an accelerator composition and a stabilizer (milk casein in aqueous solution taught at col. 13, lines 24-43, which includes Triton X-100: col. 12, lines 29-30 indicates that Triton X-100 is a stabilizer) (col. 13, line 18-col. 14, line 47). Tanaka et al. teach that vulcanizing accelerators are commonly employed in conventional rubber compositions (col. 11, lines 43-52), that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable

compounds for vulcanizing accelerators (col. 11, lines 43-52), and that the components that are commonly employed in conventional rubber compositions can be blended at an optimum ratio for each rubber product in a conventional manner (col. 11, lines 43-58). Tanaka et al. teach the structural limitations that are implied by method steps (b), (c) and (d) of claim 10 (col. 11, lines 37-42 and col. 13, line 18-col. 14, line 47). PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS. MPEP 2113.

Tanaka et al. fail to explicitly teach that a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound is used as the vulcanizing accelerator composition, and fail to explicitly teach an embodiment where an article having a tensile strength above 3000 psi is formed from a composition comprising a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound.

Hogt et al., however, disclose a rubber composition (such as polyisoprene, col. 3, lines 18-27) comprising a vulcanization accelerator, where the vulcanization accelerator may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17). Therefore, since Tanaka et al. disclose that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and since Hogt et al. disclose that a vulcanization accelerator for polyisoprene rubber may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17),

it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound as the vulcanization accelerator of Tanaka et al. since it is known to use mixtures of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, as the vulcanization accelerator for polyisoprene rubber as taught by Hogt et al.

While Tanaka et al. fail to explicitly teach an embodiment where an article having a tensile strength above 3000 psi is formed from a composition comprising a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, one of ordinary skill in the art would expect an article comprising a polyisoprene composition corresponding to that of Tanaka et al. formed with a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound taught by Hogt et al. to have a tensile strength above 3000 psi since the composition taught by Tanaka et al. and Hogt et al. corresponds to the claimed composition.

In regard to independent claim 22, Tanaka et al. teach a synthetic elastomeric polyisoprene article consisting of a composition comprising a polyisoprene (natural rubber), where the natural rubber is the only polymer in the composition (col. 13, line 18-col. 14, line 47). Natural rubber is a polyisoprene homopolymer. See attached definition of “natural rubber” from *Hawley’s Condensed Chemical Dictionary*. Tanaka et al. teach that the tensile strength of the article is 23.7 MPa (equivalent to 3437 psi) (col. 13, line 18-col. 14, line 47). Tanaka et al. teach

that the synthetic elastomeric polyisoprene article is formed from a polyisoprene (natural rubber) latex composition comprising a polymer consisting of isoprene monomers (natural rubber) and an accelerator composition (col. 13, line 18-col. 14, line 47). Tanaka et al. teach that vulcanizing accelerators are commonly employed in conventional rubber compositions (col. 11, lines 43-52), that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and that the components that are commonly employed in conventional rubber compositions can be blended at an optimum ratio for each rubber product in a conventional manner (col. 11, lines 43-58). PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS. MPEP 2113. Tanaka et al. teach that it is well known to use natural rubber to form such products as domestic gloves and surgical gloves (col. 1, lines 23-35), and that the goal of Tanaka et al. is to process natural rubber such that the occurrence of allergic reactions caused by medical instruments such as surgical gloves formed from natural rubber is reduced (col. 11, lines 37-42, col. 4, lines 13-14 and col. 2, lines 28-36).

Tanaka et al. fail to explicitly teach that a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound is used as the vulcanizing accelerator composition, fail to explicitly teach an embodiment where an article having a tensile strength above 3000 psi is formed from a composition comprising a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, and fail to explicitly teach an embodiment where the article is a glove having a tensile strength above 3000 psi.

Hogt et al., however, disclose a rubber composition (such as polyisoprene, col. 3, lines 18-27) comprising a vulcanization accelerator, where the vulcanization accelerator may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17). Therefore, since Tanaka et al. disclose that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and since Hogt et al. disclose that a vulcanization accelerator for polyisoprene rubber may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound as the vulcanization accelerator of Tanaka et al. since it is known to use mixtures of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, as the vulcanization accelerator for polyisoprene rubber as taught by Hogt et al. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the natural rubber film taught by Tanaka et al. and Hogt et al. into a glove since it is well known to use natural rubber to form such products as domestic gloves and surgical gloves as taught by Tanaka et al.

While Tanaka et al. fail to explicitly teach an embodiment where a glove having a tensile strength above 3000 psi is formed from a composition comprising a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, one of ordinary skill in the art would expect a glove comprising a

polyisoprene composition corresponding to that of Tanaka et al. formed with a vulcanizing accelerator composition comprising a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound taught by Hogt et al. to have a tensile strength above 3000 psi since the composition taught by Tanaka et al. and Hogt et al. corresponds to the claimed composition.

In regard to independent claim 27, Tanaka et al. teach a synthetic elastomeric polyisoprene article consisting of a composition comprising a polyisoprene (natural rubber), where the natural rubber is the only polymer in the composition (col. 13, line 18-col. 14, line 47). Natural rubber is a polyisoprene homopolymer. See attached definition of “natural rubber” from *Hawley’s Condensed Chemical Dictionary*. Tanaka et al. teach that the synthetic elastomeric polyisoprene article is formed from a polyisoprene (natural rubber) latex composition comprising a polymer consisting of isoprene monomers (natural rubber), an accelerator composition and a stabilizer (Triton X-100: col. 12, lines 29-30 indicates that Triton X-100 is a stabilizer) (col. 13, line 18-col. 14, line 47). Tanaka et al. teach that vulcanizing accelerators are commonly employed in conventional rubber compositions (col. 11, lines 43-52), that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and that the components that are commonly employed in conventional rubber compositions can be blended at an optimum ratio for each rubber product in a conventional manner (col. 11, lines 43-58). Tanaka et al. teach the structural limitations that are implied by method steps (b) and (c) of claim 27 (col. 11, lines 37-42 and col. 13, line 18-col. 14, line 47). PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO

THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS. MPEP 2113.

Tanaka et al. fail to explicitly teach that a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound is used as the vulcanizing accelerator composition.

Hogt et al., however, disclose a rubber composition (such as polyisoprene, col. 3, lines 18-27) comprising a vulcanization accelerator, where the vulcanization accelerator may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17). Therefore, since Tanaka et al. disclose that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and since Hogt et al. disclose that a vulcanization accelerator for polyisoprene rubber may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound as the vulcanization accelerator of Tanaka et al. since it is known to use mixtures of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, as the vulcanization accelerator for polyisoprene rubber as taught by Hogt et al.

In regard to independent claim 28, Tanaka et al. teach a synthetic elastomeric polyisoprene article consisting of a composition comprising a polyisoprene (natural rubber), where the natural rubber is the only polymer in the composition (col. 13, line 18-col. 14, line 47). Natural rubber is a polyisoprene homopolymer. See attached definition of “natural rubber” from *Hawley’s Condensed Chemical Dictionary*. Tanaka et al. teach that the synthetic elastomeric polyisoprene article is formed from a polyisoprene (natural rubber) latex composition comprising a polymer consisting of isoprene monomers (natural rubber) and an accelerator composition (col. 13, line 18-col. 14, line 47). Tanaka et al. teach that vulcanizing accelerators are commonly employed in conventional rubber compositions (col. 11, lines 43-52), that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and that the components that are commonly employed in conventional rubber compositions can be blended at an optimum ratio for each rubber product in a conventional manner (col. 11, lines 43-58). PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS. MPEP 2113. Tanaka et al. teach that it is well known to use natural rubber to form such products as domestic gloves and surgical gloves (col. 1, lines 23-35), and that the goal of Tanaka et al. is to process natural rubber such that the occurrence of allergic reactions caused by medical instruments such as surgical gloves formed from natural rubber is reduced (col. 11, lines 37-42, col. 4, lines 13-14 and col. 2, lines 28-36).

Tanaka et al. fail to explicitly teach that a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound is used as the vulcanizing accelerator composition, and fail to explicitly teach an embodiment where the article is a glove.

Hogt et al., however, disclose a rubber composition (such as polyisoprene, col. 3, lines 18-27) comprising a vulcanization accelerator, where the vulcanization accelerator may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17). Therefore, since Tanaka et al. disclose that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and since Hogt et al. disclose that a vulcanization accelerator for polyisoprene rubber may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound as the vulcanization accelerator of Tanaka et al. since it is known to use mixtures of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound, as the vulcanization accelerator for polyisoprene rubber as taught by Hogt et al. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the natural rubber film taught by Tanaka et al. and Hogt et al. into a glove since it is well known to use natural rubber to form such products as domestic gloves and surgical gloves as taught by Tanaka et al.

In regard to dependent claim 11, Tanaka et al. and Hogt et al. teach the article as discussed above in regard to claim 10.

Tanaka et al. fail to explicitly teach an embodiment where the article is a glove.

However, Tanaka et al. teach that it is well known to use natural rubber to form such products as domestic gloves and surgical gloves (col. 1, lines 23-35), and that the goal of Tanaka et al. is to process natural rubber such that the occurrence of allergic reactions caused by medical instruments such as surgical gloves formed from natural rubber is reduced (col. 11, lines 37-42, col. 4, lines 13-14 and col. 2, lines 28-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the natural rubber film taught by Tanaka et al. and Hogt et al. into a glove since it is well known to use natural rubber to form such products as domestic gloves and surgical gloves as taught by Tanaka et al.

In regard to dependent claims 12 and 14, Tanaka et al. and Hogt et al. teach the article as discussed above in regard to claim 10.

Tanaka et al. fail to explicitly teach an embodiment where the article is a condom (as claimed in claim 12) or a catheter (as claimed in claim 14).

However, Tanaka et al. teach that it is well known to use natural rubber to form such products as condoms and catheters (col. 1, lines 23-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the natural rubber film taught by Tanaka et al. and Hogt et al. into a condom or a catheter since it is well known to use natural rubber to form such products as condoms and catheters as taught by Tanaka et al.

In regard to dependent claim 13, the recitation “probe cover” is an intended use phrase that has been given little patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte*

Masham, 2 USPQd 1647 (1987). Furthermore, any rubber film (and an article such as a condom or a glove [see rejection of claims 10 and 120 can be used as a “probe cover”).

In regard to dependent claims 16 and 23, Tanaka et al. teaches that the latex composition from which the article/glove is prepared comprises a milk protein salt (col. 14, line 10 and col. 13, lines 20-32). Furthermore, the claim language does not require that the final product (which is formed from the polyisoprene latex composition) comprise the milk protein salt recited in claims 16 and 23.

In regard to dependent claims 17 and 25, Tanaka et al. teaches that the latex composition from which the article/glove is prepared comprises a sodium caseinate (col. 14, line 10 and col. 13, lines 20-32). Furthermore, the claim language does not require that the final product (which is formed from the polyisoprene latex composition) comprise the sodium caseinate recited in claims 17 and 25.

In regard to dependent claim 24, the recitation “said polyisoprene latex composition is stable to storage for up to at least 7 days prior to its use in the dipping and curing process” has been given little patentable weight since this recitation is directed to a characteristic of an intermediate product (the “polyisoprene latex composition”, from which the claimed glove is “prepared” [see claim 22]) of the claimed glove, and not to the glove itself in its final form, since this recitation is directed to the latex composition “prior to its use in the dipping and curing process”, and therefore does recite any characteristic of the glove in its final form.

In regard to dependent claim 26, Tanaka et al. and Hogt et al. teach the elastomeric article formed from a vulcanizing accelerator mixture of a guanidine, a dithiocarbamate and a thiazole as discussed above in regard to claim 10. While Hogt et al. fail to teach that each of the

accelerators of the accelerator mixture are present in the latex composition in the claimed range for each of the accelerators, Hogt et al. teach that 0.3 to 4 parts per 100 parts rubber of the accelerator mixture is used (col. 8, lines 18-22). Since Hogt et al. teach that a mixture of the accelerators may be used, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the relative amounts of the accelerators in the accelerator mixture of Hogt et al. depending on the particular desired end result, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). MPEP 2144.05 II.B.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (USPN 6,239,253) in view of Hogt et al. (USPN 5,610,240) and in further view of Ozawa et al. (USPN 6,187,857) and in further view of Pollack (USPN 3,732,578).

Tanaka et al. and Hogt et al. teach the article as discussed above in regard to claim 10. Hogt et al. teach that diphenyl guanidine is a suitable guanidine for the mixture of vulcanizing accelerators (col. 8, lines 5-17). Hogt et al. also teach that mercaptobenzothiazoles and dithiocarbamates are suitable accelerators for the mixture of vulcanizing accelerators (col. 8, lines 5-17).

Tanaka et al. and Hogt et al. fail to explicitly teach that the dithiocarbamate is zinc diethyldithiocarbamate and that the thiazole is zinc 2-mercaptobenzothiazole.

Ozawa et al., however, disclose that zinc 2-mercaptobenzothiazole is a suitable accelerator for preparing elastomeric polyisoprene articles (col. 2, lines 8-13 and col. 7, lines 35-38).

Pollack, furthermore, discloses that zinc diethyldithiocarbamate is a suitable accelerator for preparing elastomeric polyisoprene articles (col. 3, lines 42-49 and col. 4, lines 49-53).

Therefore, one of ordinary skill in the art would have recognized to have used zinc 2-mercaptobenzothiazole as the thiazole of the article taught by Tanaka et al. and Hogt et al. and to have used zinc diethyldithiocarbamate as the dithiocarbamate of the article taught by Tanaka et al. and Hogt et al. since zinc 2-mercaptobenzothiazole and zinc diethyldithiocarbamate are suitable accelerators for preparing elastomeric polyisoprene articles as taught by Ozawa et al. and Pollack, respectively.

Response to Arguments

6. Applicant's arguments on pages 2-3 of the Response filed December 15, 2008 regarding the 35 U.S.C. 112 rejection of claims 16, 17 and 23 have been fully considered but are not persuasive.

Applicant's statement that "it is well known in the art of preparing elastomeric compositions that trace amounts of additives, such as accelerators and stabilizers, may be present in the final articles" does not clarify whether or not claims 16, 17 and 23 require that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are present in the final product. Since Applicant states that "it is well known" that trace amounts "may" be present in the final product, it is unclear whether or not Applicant intends to require that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are present in the final product.

Applicant states that “Applicants agree that the language of the claims does not require that the milk protein salt and sodium caseinate are actually present in the final product”, but the fact that claims 16, 17 and 23 do not include optional language causes claims 16, 17 and 23 to read as if the milk protein salt and sodium caseinate are required in the final product claims 16, 17 and 23. Claims 16, 17 and 23 should be amended so that it is clear (from the claim language) what Applicant intends to recite as a required component of the final product, as opposed to what is not required as a component of the final product.

7. Applicant’s arguments on pages 3-5 of the Response filed December 15, 2008 regarding the 35 U.S.C. 103 rejection of claims 10-14, 16, 17 and 22-28 have been fully considered but are not persuasive.

Applicant argues that Hogg et al. does not teach or suggest “a specific accelerator composition comprising a mixture of a dithiocarbamate, a thiazole compound and a guanidine compound”. However, since Tanaka et al. disclose that dithiocarbamate compounds, thiazole compounds and guanidine compounds are suitable compounds for vulcanizing accelerators (col. 11, lines 43-52), and since Hogg et al. disclose that a vulcanization accelerator for polyisoprene rubber may be a mixture of conventional, known vulcanization accelerators, such as a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 8, lines 4-17), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mixture of a dithiocarbamate compound, a thiazole compound and a guanidine compound as the vulcanization accelerator of Tanaka et al. since it is known to use mixtures of conventional, known vulcanization accelerators, such as a mixture of a

dithiocarbamate compound, a thiazole compound and a guanidine compound, as the vulcanization accelerator for polyisoprene rubber as taught by Hogt et al.

Applicant argues that the mixture of the three known vulcanization accelerators results in unexpected results over compositions comprising only two of the known vulcanization accelerators (Samples 4-6) or only one of the known vulcanization accelerators (Sample 7). Pages 21 and 22 of specification. However, Applicant has not shown that the evidence relied upon establishes “that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance.” *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). MPEP 716.02. For example, the tensile strength values for (for example) Sample 4 appear to be comparable to the tensile strength values for at least some of the Samples comprising the mixture of the three known vulcanization accelerators. Page 22 of specification. Applicant has not shown how the differences between the Samples comprising the mixture of the three known vulcanization accelerators and Samples 4 and 5 “are in fact unexpected and unobvious and of both statistical and practical significance.” 22 USPQ2d at 1319. Furthermore, the characterization of Samples 6 and 7 as “fail[ing] to meet minimum FDA regulatory standards...” (page 23, lines 10-13) appears to be contradictory to that which is stated in Table 2 on page 22, which states in regard to Samples 6 and 7 “No tensile measured/sample did not break”. If “No tensile measured”, Applicant’s statement that Samples 6 and 7 “fail[ing] to meet minimum FDA regulatory standards...” is not supported with data/evidence. If “sample did not break”, this suggests that the samples were stronger than the minimum FDA regulatory standard.

Conclusion

8. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, THIS ACTION IS MADE FINAL even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is (571) 272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter B Aughenbaugh /
Examiner, Art Unit 1794

02/24/09

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794